Pilot study on the effects of an oral double Chinese herb formula on extremity lymphedema

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Introduction: Recent work has implicated leukotriene B4 (LTB4) in the pathogenesis of acquired lymphoedema. Therapeutic strategies that aim to attenuate LTB4 activity form the basis of several clinical studies eg Ubenimex/ Bestatin whilst ketoprofen may reduce tissue/ skin thickness. Further, it was noted that several simple Traditional Chinese Medicine (TCM) herbs may induce LTB4 dehydrogenase which converts LTB4 into less bioactive forms. Thus our hypothesis was that ingestion of TCM may improve the signs and symptoms of lymphoedematous extremities.

Methods: For our pilot study, we recruited 9 subjects with established extremity lymphoedema. Ages ranged from 40 to 68. The most common cause of swelling was breast cancer treatment. Some had had lymphoedema surgery already, whilst others were considering it in the future. The two herbs (Astragulus, Peoniae rubra) were administered in a powdered form six days a weeks for six months. They were monitored monthly by a TCM practitioner and TCM Research assistant for side effects etc; measurements included body weight, water displacement by the affected limb. Standard blood tests as well as LYMPQoL questionnaires were taken at baseline and at 3 monthly intervals.

Results:

Body weight
Displaced water volume

There were no reported side effects or complications; there were no episodes of infection during the period of study. There were no differences in the blood tests with regards to renal and liver function or complete blood picture. Although there was a tendency to reduced Displaced Water Volume by 6 months, due to the small numbers these did not reach statistical significance. There was a significance improvement in QOL scores, that were usually evident by the 2nd or 3rd month. The most reported improvements were reduced heaviness, congestion, discomfort and distal tingling. There were no significant change in function but some patients reported being ‘less clumsy’. Patient satisfaction was very high.

Conclusions: The oral twin TCM herb formula seems to improve symptomatology and QOL in a pilot series of patients with established extremity oedema without side effects. We will also explore better methods to objectively measure tissue/limb ‘tightness’. Continued study will aim to establish effective safe doses, whilst larger numbers will improve statistical rigor and allow more detailed analysis.